20081112.ba v04_n222.bam.20081112

>From ???@??? Wed Nov 12 09:37:28 2008 -0600
Date: Wed, 12 Nov 2008 09:36:41 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 4222
Message-Id: <20081112143448.8FD5410B1BC@srvr1.theporch.com>

BOATANCHORS Digest 4222

Topics covered in this issue include:

Message-ID: <49161B8B.4080700@ar88.net>

Date: Sat, 08 Nov 2008 18:06:51 -0500
From: Al Klase <al@ar88.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Home Brew Filament Wiring
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

Hi Breck,

The techniques Scott mentions are used in places like test equipment and hi-fi preamps, where the noise floor has to be really low, Modern top-drawer receivers, AR-88, SP-600, and 51J to name a few, universally ground one side of the filament circuit. The audio output from the detector is typically pretty "hot," so the RF considerations take precedence. The SP-600 runs three separate filament windings. All have one side grounded. Two of them are 7.5 VAC, and feed the front-end tubes through hefty low-pass filters.

Al

Scott Robinson wrote:
> Hi Breck,
>
> To minimize hum, you should use twisted pair and attach the center tap
> to a source of about 30VDC above ground, properly bypassed, of course.
> This is how good hollow state audio equipment is done. The 30V is to
> ensure that all grids are cut off with respect the the heater ends
> sticking out out of the cathode.
>
> The downside of this for circuits that handle RF is that unless you
> add bypass caps from both sides of the heater wiring to ground here
> and there, you may get unwanted interstage coupling through the heater
> wiring.
>
> Personally, I'd use the twisted wire method and add 0.05 uF bypasses
> at each IF tube and 0.01 uF for the front end tubes. I don't like
> listening to hum. I'd use very small 100V ceramic parts and keep the
> leads very short; otherwise the lead inductances will make the
> bypasses useless at even mid-RF frequencies.
>
> Peace,
>
> Scott
>
> At 9:09 AM -0500 11/8/08, B. Smith wrote:
>> I am   wiring a HBR receiver with an external power supply. All tubes

>> are 6.3 volts in the receiver and there are 14 tubes. The external
>> supply will supply 6.3 volt AC.
>>   I would be interested in the list's suggestions on filament
>> wiring. Should I have a floating ground in the receiver and then run
>> two twisted wires from the tube sockets to the external supply
>> filament transformer or should I ground one pin of the filament for
>> each tube at its socket and just run a single wire to the external
>> transformer?
>>
>> 73
>> breck k4che
>>
>> Dover Delaware, ann't nutten in Dover
>> except chickens, a NASCAR track, and hams that
>> can't solder.
> ---
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg.com
> Version: 8.0.175 / Virus Database: 270.9.0/1775 - Release Date: 11/8/2008 9:56
AM
>
>

--
Al Klase - N3FRQ
Jersey City, NJ
http://www.skywaves.ar88.net/

To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Heaters lit 24/7 good/bad?
Message-ID: <1226189323.49162a0b4ef4c@webmail.hiwaay.net>
Date: Sat, 08 Nov 2008 18:08:43 -0600 (CST)
From: scb@hiwaay.net
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit

Thnx for the great responses, Groupp!
 I very likely killed some perfectly good tubes too early with good
intentions, live and learn. This doesn't bode well for BFO tubes in standby,
recording bias oscillators, and other such examples where no cath current
flows.
Someone sent me this most excellent ref, cut-and-paste;
http://www.pmillett.com/Books/Tomer_1960_Getting_the_Most_Out_of_Vacuum_Tubes.p
df

Best Rgds; Steve Bringhurst

Message-ID: <001b01c94242$c3a476e0$709d480c@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Home Brew Filament Wiring
Date: Sun, 9 Nov 2008 00:11:22 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="Windows-1252"
Content-Transfer-Encoding: 7bit

> ....I would be interested in the list's suggestions on filament wiring.
...

This is another of those one size fits all arguements which goes like: Do it the best Heaven-sent way and avoid all problems. Scott gave us an additonal arguement that says that no way is perfect so pretend you have the best method by adding a bunch of additional do's to compensate for the additional unecessary problems. That's nuts!

The proper way to decouple heaters in RF circuits is to ground one pin directly to chassis, bypass the "hot" filament pin with a capacitor value who's self resonant frequency is above potential intercoupling frequencies and interupt RF current flow in the hot heater wiring side with series RF chokes. The inductance of a short length of bus wire to socket saddle (which is hopefully well chassis grounded) is next best to soldering directly to chassis. Both are considerably lower impedance than bypass capacitors. Bypassing the hot pin doesn't do so much by itself but is necessary for the series chokes to impede RF frequency currents between local stage chassis circulating currents. RF should only be passed from stage to stage through interstage coupling devices. At high HF frequencies and beyond it may be necessary for the heater to "join" the cathode by isolating it with RF chokes in both leads. Now what does the foregoing have to do with hum at audio frequencies?

An RF amp, local oscillator, IF amp, etc. shorts any line frequency induced noise to ground. Nor will 60 Hz couple through an IF transformer. So little 60Hz can be induced into an RF frequency stage cathode that the chance of transconductance modulation to produce hum on an RF carrier occurring is about as nil as it gets unless there is a functional short circuit between cathode and heater. Check out tube data sheet interelectrode capacitance values and do a little math. Lastly, reasonably modern receivers employ high level detection so that not much AF gain is required to adequately drive the AF output amplifier.

So where is this mysterious communications receiver hum coming from? Usually from lousy wiring practices producing electrostatic (no shielding) hum injection into grid circuits or AF ground returns mixing with chassis heater currents over extended distances. Heater and audio grounds should obviously not be entangled.

So now does it seem that twisted pair heater wiring to all tubes is a feasable approach to eliminating chance hum? Musta been an awful lot of dumb engineers throughout radio history to chassis ground all of those tube socket heater terminals.

End of outrage....

Arden Allen
KB6NAX

Message-ID: <7406949.1226258839696.JavaMail.root@mswamui-blood.atl.sa.earthlink.net>
Date: Sun, 9 Nov 2008 11:27:19 -0800 (GMT-08:00)
From: spr@earthlink.net
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Home Brew Filament Wiring
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit

Folks,

IN de-humming my SP-600, whihc badly needed it, I found several examples of incorrect grounding practice in the audio wiring, introucing chassis groud potenntialk differences due to heater currents into the audio. Once I fixed those, which required no changes to the heater wiring, the hum level was OK.

As far as design practices go, I have observed for years that communications receiver designers thought that audio was a nuisance last bit to add on and it's goodness or lack thereof did nto affect the main functioon of the receiver. I disagree; high ouput impedances from un-fedback pentod output stages will make any connected loudspeaker misbehave, stretching the duration of noise impulses and making low frequencies muddy, both of which decrease intelligibility. The hum is to me jsut an annoyance and an indicationof poor detail design, so I fix it where I can.

I agree that balanced heater wiring is not needed, but if I were wiring a project I might do it anyway, just to be perverse.

Regards,

Scott

-----Original Message-----
>From: Arden Allen <gumbear@pacbell.net>
>Sent: Nov 9, 2008 12:11 AM
>To: Old Tube Radios <boatanchors@theporch.com>
>Subject: Re: Home Brew Filament Wiring
>
>> ....I would be interested in the list's suggestions on filament wiring.
>...
>
>This is another of those one size fits all arguements which goes like: Do
>it the best Heaven-sent way and avoid all problems. Scott gave us an
>additonal arguement that says that no way is perfect so pretend you have the
>best method by adding a bunch of additional do's to compensate for the
>additional unecessary problems. That's nuts!
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>capacitors. Bypassing the hot pin doesn't do so much by itself but is
>necessary for the series chokes to impede RF frequency currents between
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>to do with hum at audio frequencies?
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>noise to ground. Nor will 60 Hz couple through an IF transformer. So
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>occurring is about as nil as it gets unless there is a functional short
>circuit between cathode and heater. Check out tube data sheet
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>modern receivers employ high level detection so that not much AF gain is
>required to adequately drive the AF output amplifier.
>
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>dumb engineers throughout radio history to chassis ground all of those tube
>socket heater terminals.
>
>End of outrage....
>
>Arden Allen
>KB6NAX
>

Mime-Version: 1.0
From: "k4pf@juno.com" <k4pf@juno.com>
Date: Sun, 9 Nov 2008 20:46:35 GMT
To: Old Tube Radios <boatanchors@theporch.com>
Subject: a Google Books Cornucopia
Message-Id: <20081109.154635.18833.0@webmail20.vgs.untd.com>
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline
Content-Type: text/plain; charset=ISO-8859-1

Hi, Gang

Books.google.com has been expanding their non-fiction coverage.

If you search for "electrical" in the "show full view only"
category, some neat books emerge. I've been browsing works
by Oliver Heaviside and Nicola Tesla.

It's also nice to have "Methods of Measuring Electical Resistance"
by Northrup (of Leeds and Northrup fame).

The books can be read on line, or the pdf files can be downloaded
and printed.

Google only provides full texts to the early 1920's,
it seems, but this should improve due to a recent deal they negotiated
with the book publishers.

For some reason, Google Books doesn't work with Firefox =

or Opera browsers, but works well with Internet Explorer.

73,
Ed Knobloch

Message-ID: <32796307.1226275804750.JavaMail.root@elwamui-
rubis.atl.sa.earthlink.net>
Date: Sun, 9 Nov 2008 19:10:04 -0500 (EST)
From: Richard Dillman <ddillman@igc.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Report: MRHS KMI Antenna Repair
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit

In an earlier message I announced that we had lost the signals from four antennas, all of them on the site of former AT&T high seas radiotelephone station KMI which is immediately to the west of the RCA receiving station for KPH/KSM. On Saturday 8 November a team of four MRHS members spent the day at the AT&T and RCA sites to diagnose and repair the problem. In this message I'll report what we found and what we did.

But before I get to the report I want to personally acknowledge the response we received to the earlier message about the antenna problem. That message was intended simply as an announcement to let people know that KSM and K6KPH would be off the air on 8 November with an explanation as to why. What we received in response were many messages of encouragement stating that the writers were confident that we would find and repair the problem (confidence that we were not able to share at the outset!). Other writers took the opportunity to say how much they enjoyed listening to KSM and contacting K6KPH. Others stepped up to offer their help. All of this was very heartwarming and very much appreciated. Thank you. It means a lot to know that our project means as much to others as it does to us.

Here's the big picture of the situation: The KMI receive building is located about one mile to the west of the RCA receive site. KMI was once blessed with a truly impressive antenna farm consisting of several fixed wire log periodic antennas along with rhombic and onmi antennas. When the National Park Service purchased the site they demolished the log periodic antennas. But the MRHS was able to preserve two rhombics and two omnis. These are impressive and historic antennas. Luckily, a trunk of 16 coaxial cables still existed intact between the AT&T and RCA buildings. We used four of these cables to bring the signals from the KMI antennas to the RCA building where we integrated them into our antenna switching matrix. At the RCA end there are four preamplifiers between the cables from the AT&T building and the KPH multicouplers. The signals from these four antennas were lost about three weeks ago.

As custom and tradition demand for any outside antenna work, we encountered thick fog and rain at the radio sites. The first phase of troubleshooting began at the RCA end where we confirmed that the preamplifiers and the cables to the multicouplers were intact.

Bill checks the preamplifiers and cables at the RCA building:

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20004.jpg

As expected, all was well at the RCA end. Steve measured the capacitance of the cables in the direction of the AT&T building. By comparing these reading with the known characteristics of the cable we determined approximate length of cable between the RCA and AT&T buildings. This and resistance readings indicated a problem with the cable near the AT&T building.

With testing at the RCA building complete we moved operations to the abandoned AT&T building. Our first step there was to connect a receiver to the cables coming from the four antennas to confirm they and their Heliax cables remained intact. We felt some relief when signals were received loud and clear.

Icom R-71A set up as a test receiver at the AT&T building. The Heliax cables from the antennas may be seen coming up from the floor behind the rack:

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20006.jpg

More measurements were made looking back toward the RCA building. These seemed to confirm a cable fault near the AT&T building.

Steve takes measurements in the AT&T building as Mike and Bill look on:

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20014.jpg

The next step was to trace the trunk containing the 16 coaxial cables. For this task we were lucky enough to have a good cable tracer, ironically left behind by AT&T when they closed KMI.

Bill uses the cable tracer to locate the cable trunk. The marker flags ominously show that the cable passes directly under the newly installed solar power system:

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20015.jpg

Excavation of the cable was the next step.

Mike (who actually did a lot of shoveling) watches as Bill clears the cable by hand. Luckily, the rain had mostly let up by then:

http://www.radiomarine.org/KMI-Antennas/P1010033.jpg

Our fears were confirmed when we exposed the cable trunk to find that the outer conduit had been breached and several of the inner coaxial cables had been severed.

Bill exposes the broken conduit and the severed coaxial cables:

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20026.jpg

It turned out that the situation was bad, but not as bad as it could have been. The conduit and cables were damaged but not completely severed. Steve's testing revealed that six of the 16 cables were still usable.

The "wound site" cleared of dirt with the 300 pair telco cable to the RCA building appearing below:

http://www.radiomarine.org/KMI-Antennas/P1010040.jpg

Mike, Steve and Bill cleared the area of the break, then sealed it as best they could.

Conduit with temporary repair:

http://www.radiomarine.org/KMI-Antennas/P1010063.jpg

We also tried to pump out the cable vault where the cables enter the AT&T building. The vault is typically filled with water at various levels since the sump pump has been inoperative for years. When we first looked inside several years ago the water contained many drowned rats, thus our term for it: rat soup. The water level was lower on Saturday but our efforts to pump it dry failed due to a shorted sump pump, generator problems and the clogging of the pump Bill brought along.

Bill bravely descends into the cauldron of rat soup to try to get the pump working:

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20028.jpg

The next step was to see if signals from the antennas could actually be sent over the remaining coaxial cables to the RCA building. I returned to the RCA phone room to help Steve ring out the coaxial lines. The six remaining cables looked good. In coordination with Steve I then moved the patch cords for our multicouplers to four of the remaining good cables.

Patch cables moved to new cables 11 through 14 (we were previously using 1 through 4):

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20038.jpg

When signals were received at the KPH/KSM/K6KPH operating room we all felt great relief.

These repairs are just temporary. It remains to be seen what we can do to fully

restore the cable and prevent the same thing from happening again. In the end we called it a day well spent.

Bill, dirty but presumably pleased, contemplates the day's work:

http://www.radiomarine.org/KMI-Antennas/KMI-Ant%20009.jpg

We'll let you know as cable restoration work continues. For now we're happy to once again have access to the four KMI antennas. We expect to return to our normal operating schedule next Saturday.

VY 73,

RD

==========
Richard Dillman, W6AWO
Chief Operator, Coast Station KSM
Maritime Radio Historical Society
http://www.radiomarine.org
==========

Message-ID: <915B82693B174B1E9A1EE793679442B0@boudreaux>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Report: MRHS KMI Antenna Repair
Date: Sun, 9 Nov 2008 19:20:36 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="UTF-8";
     reply-type=original
Content-Transfer-Encoding: 7bit

You guys have all my sympathy. I've dug up my share and more of railroad signal cables, almost always in a muddy ditch , during a cold rain or buried two feet under nearly impregnable roadbed ballist. I fully believe there are little gremlins who hang around looking for mayhem like this to inflict upon us.

Consider this:
Our signal cables are about as big around as your thumb.
A railroad right-of-way is typically 50 feet, and it can be buried
just about anywhere in that horizontal space.
The vertical dimension can be anything from 5 inches to 3 feet.
The bit on the end of a hole boring machine is about as big
around as a softball. So picture this:
Big space. Small bit. Tiny cable. So how come they can
bulls-eye this cable 3 out of 5 times?? GOT to be gremlins!

73 Dave S.

Message-ID: <BAY110-DS611CE749105BD343D6780A01A0@phx.gbl>
From: "JAMES HANLON" <knjhanlon@msn.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Push-Pull-Push Oscillator
Date: Mon, 10 Nov 2008 14:16:26 -0700
MIME-Version: 1.0
Content-Type: multipart/alternative;
     boundary="----=_NextPart_000_0258_01C9433E.EAE04750"

This is a multi-part message in MIME format.

------=_NextPart_000_0258_01C9433E.EAE04750
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

As I recall, one of our list members was looking for a QST article on =
the Push-Pull-Push Oscillator. I ran across such an article today. It =
is in QST for September, 1936, pages 19 through 21, "Some Trick Crystal =
Circuits," by J. Stanley Brown, W3EHE. It covers several variations of =
the Push-Pull and Push-Pull-Push oscillator circuits, and it references =
an earlier article also by Brown, "Simplifying the P{ush-Pull-Push =
Crystal Oscillator," in QST, July 1936. =20

Jim, W8KGI
------=_NextPart_000_0258_01C9433E.EAE04750
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

```
* is not set to send PLAIN TEXT ONLY and needs adjusting  *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

------=_NextPart_000_0258_01C9433E.EAE04750--

------------------------------
From: JONWEINER@aol.com
Message-ID: <cf2.45d5e7c1.364a0169@aol.com>
Date: Mon, 10 Nov 2008 16:28:09 EST
Subject: Sargent 8-34
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Is there any one who might have any information  (especially schematic) for
the Sargent model 8-34 receiver or model 8  pre-selector?

Jon.
K1VVC

**************AOL Search: Your one stop for directions, recipes and all other
Holiday needs. Search Now.
(http://pr.atwola.com/promoclk/100000075x1212792382x1200798498/aol?redir=http://
searchblog.aol.com/2008/11/04/happy-holidays-from
-aol-search/?ncid=emlcntussear00000001)

------------------------------
Message-ID: <7FA75C5B8EC04C89ACCD1B2FAB5E7003@boudreaux>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Now THIS Is How To List Something....
Date: Tue, 11 Nov 2008 18:11:51 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

260305855603

------------------------------
To: Old Tube Radios <boatanchors@theporch.com>
Content-Transfer-Encoding: 7bit
Subject: Re: [Milsurplus] Now THIS Is How To List Something....
Date: Tue, 11 Nov 2008 19:53:32 -0500
MIME-Version: 1.0
```

From: jcoward5452@aol.com
Content-Type: text/plain; charset="us-ascii"; format=flowed
Message-Id: <8CB1278382D7010-3B4-13A5@webmail-md12.sysops.aol.com>

Willard seems to be happy right where he is and in such good hands too!I don't think ol' Willard needs any electrolyte to get a full charge!
 JC KE6PPF

Message-ID: <5C08605B517B4E07BF4FF152099D27E9@boudreaux>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <boatanchors@theporch.com>
Subject: Re: Now THIS Is How To List Something....
Date: Tue, 11 Nov 2008 19:50:01 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

 (Dreaming of peaking her grids and dipping her plates.....)

Message-ID: <000701c9448f$909e37f0$0a9f480c@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Maximum Mendacity
Date: Tue, 11 Nov 2008 22:26:07 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Browsing through a Sony ES series wham bang digital surround sound theater receiver "Technical Background" manual on their website I came upon the audiophalacy that should go into the history books. Under a picture of the pretty speaker terminal lineup on the back of one of their rigs was the statement, "When Sony's engineers discovered that the speaker terminal pigments and fillers actually compromised anti-resonant properties, we took the fillers out." Can anyone beat that?

Arden Allen
KB6NAX

From: "Brian Goldsmith" <brian.goldsmith@echo1.com.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Maximum Mendacity
Date: Wed, 12 Nov 2008 20:02:54 +1100
Message-ID: <DF5CF0A490B64D0B86781357657B1F4D@pcbriang>
MIME-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit

-----Original Message-----
From: Arden Allen

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*****I would have thought Sony had worked out that the terminal assembly was physically resonating when impinged by sound waves from the speakers!

Brian G.

From: JONWEINER@aol.com
Message-ID: <cb3.45ed58d6.364c4352@aol.com>
Date: Wed, 12 Nov 2008 09:33:54 EST
Subject: National FB-7 Coils to trade
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I have a few single coils for the National FB-7 receiver to trade. They are 80 meter OSC coil, 20 meter DET coil, "A" DET coil. I am looking for the "F" DET coil and the "E" OSC coil.

Jon,
K1VVC

**********Get the Moviefone Toolbar. Showtimes, theaters, movie news & more!(http://toolbar.aol.com/moviefone/download.html?ncid=emlcntusdown00000001)

Date: Wed, 12 Nov 2008 09:39:29 -0500
From: Ed White WA3BZT <wa3bzt@verizon.net>
Subject: Texas Raiders
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <491AEAA1.1050307@verizon.net>
MIME-version: 1.0
Content-type: text/html; charset=ISO-8859-1
Content-transfer-encoding: 7bit

<p><pre>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

****
*   To the SENDER of this email: *
--
* Please don't use HTML tags or 'rich text' here. *
*   Set your emailer to turn that off.   *
****
</pre><p>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
</head>
<body bgcolor="#ffffff" text="#000000">
<p style="margin-bottom: 0pt;">Houston, We Have a Problem: The
future of one of the 12 remaining B-17 bombers still capable of flight is in doubt. Texas Raiders, a vintage World War II B-17 that is part of the <u><a title=""
 href="http://r.listpilot.net/c/afa/38sz2v8/1mpwt" target="_blank">Commemorative Air Force</u>,
must vacate its current hanger in Houston at the end of the month, since the hangar owner has opted to terminate the lease. The aircraft is currently in the midst of being renovated so cannot fly, CAF's Gulf Coast Wing said in <u><a title=""
 href="http://r.listpilot.net/c/afa/38sz2v8/1mpxu" target="_blank">a release </u>Nov. 6. It needs a new hangar that is available immediately so that the restoration can be completed. Otherwise, Texas Raiders
would have to be partially dismantled and moved to CAF headquarters at Midland, Tex., essentially "nullifying the six years of hard work" by CAF volunteers, according to the release. "We are desperately seeking assistance from an individual or corporation, which will allow this

restoration to be completed in a protected environment," said CAF President Stephan Brown. He continued, "All we need is the space; we'll do the rest." The restoration, if allowed to continue undisturbed, is within a nine-month window of completion. CAF said.</p>
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End of BOATANCHORS Digest 4222
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